

# news

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BI-MONTHLY

## REPORT

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## Status of Amateur Radio Rulemaking

We made our regular telephone call to the FCC in Washington this past week to determine the present status of Amateur Radio Rulemaking. We chatted with John B. Johnston, W3BE, Chief of the FCC's Personal Radio Branch. Among other things, we talked about Novice Enhancement, PRB-3 — the privatizing of Amateur Radio call signs ...and the reorganization and rewriting of the §Part 97 Amateur Radio rules.

### FCC VIEWS ON NOVICE ENHANCEMENT...

"Gauging the success of Novice Enhancement depends upon what objective you had in mind," Johnny said. "If your objective was to keep people from dropping out of the service and to move up from Novice to Technician ...which I think was the major FCC thrust of the Rulemaking ...then Novice Enhancement is successful. For those that thought that this was going to bring in lots of new people ...Well, I don't think that is working. The initial rush of newcomers we saw back last Spring apparently was just to beat the deadline... (for taking the new expanded examination.)"

Johnston also said that many times information published or circulated concerning amateur radio growth — or lack of it — is not supported by the actual licensing numbers. "Ham radio is not going to the 'dogs' ...nor is

ham radio growing too fast. There have been reports of both ...possibly based on sales of amateur equipment or magazines."

He sent us several pages of ham licensing records for every month and class over the past ten years. Due to space considerations, however, we are publishing only the December chart which is fairly indicative of all of the other months. For those readers who don't care for stats, bear with us. We have many manufacturer and dealer subscribers and these statistics are very important to the amateur radio industry who use them for market forecasting purposes.

The number of Novices hit a high in April of 1983 (92,918). It is interesting to note, however, that the total number of Novices and Technicians taken as a group has not changed much over the years. There were 168,514 in April 1983 ...168,852 in April 1987. The December 1987 amateur census shows this to be 176,479.

### TEN YEAR LICENSES TO AFFECT CENSUS

If you think that determining ham radio expansion is confusing now, wait until next year! Johnston cautioned that "...1988 will be the last year that licensing figures will actually indicate amateur radio growth. We went to a ten year license term in



January of 1984. For five years -- 1989 through December of 1993 -- we won't have any renewals ...and we won't have any 'drop-out' figures. We will go for a five year period where no one will be deleted from the data base. The numbers will soar! The Call Book magazine will get fatter ...much fatter!"

"A lot of amateurs that would ordinarily let their license lapse will continue on for an additional five years. We will see increases in Amateur Radio which will be totally artificial. New application records will be added to the data base ...but none will be deleted for a five year period."

We looked into what this would mean to the amateur census and found that approximately 3,500 amateurs renew their ham tickets monthly. (Calendar year 1987 FCC Amateur Radio licensing records show 40,327 renewals, 26,517 new amateurs and 15,336 "deleted records" [drop-outs].) Thus the total number of amateurs will artificially increase at least by 30% (more than 125,000) over a five year period.

"We will see five years of substantial growth beginning with January 1989 -- and then much slower growth from 1994 on..." when the ten year term licenses that were issued in 1984 must be renewed. "We will be comparing apples and oranges for the next five years," Johnston said.

...And that is assuming no real increase in the U.S. amateur census. Any actual increase will be in addition. If last years dismal growth (3.25%) is compounded for five years, the ham census will stand at 650,000 in 1994 -- nearly a 50% increase over today. Clearly, a million U.S. licensed amateurs within a five year period is within our grasp.

## ON A NO-CODE AMATEUR LICENSE....

"We have completed the staff work on Ben Johnson's proposal (NY00, Washington, Iowa) to drop the code requirement for the Novice and Technician license, but the decision has not yet been released. We are aware that Canada is considering a no-code license. Ray Kowalski (ex-FCC Division Chief) made a comment that pretty much sums up our feeling

on the matter. 'In the United States, no-code is dead ...is laying in the coffin ...the ARRL drove a stake through its heart ...and it is not going to go any place until the ARRL pulls that stake out.'

I have gone through numerous no-code exercises ...two of which actually got out on the street. Both of them were very expensive ...involving a lot of comments, ...Congressional inquiries ...and an awful lot of staff work. Both of them led to the same conclusion. The hams do not want a no-code license."

"The comments in the last one ran twenty to one against it. While this may have been orchestrated, never-the-less this is what the record shows. There is nothing 'internal' being discussed about a no-code amateur license. Another no-code proposal dealing with handicapped people by a Mr. Hailey was denied and dismission on January 12th."

## ON THE REWORDING OF §PART 97....

I asked Johnston where the reported reorganization of the §Part 97 Amateur Rules stood. Ray Kowalski had told us that the FCC staff work had been completed. "We are still working on it actually. We had completed work on that matter for the division, but now that we have new management ...we did some more work on it."

"There is still a question as to whether it will be released at all, but if it is, I would guess it probably would be this Spring. It is one of those things where you take it to the Commission and ask their opinion. You never really know if it will go out or not. Basically the revision tries to get rid of a lot of obsolete rules. There are no 'earth shaking' changes proposed. We are just trying to make §Part 97 a little bit easier to use."

Kowalski had mentioned about the possibility of some new 'wrinkles' in amateur emergency communications but Johnston said that "...there were none. We wanted to get that in at one time, but it 'didn't fly'," he said. "§97.1 says that these rules are designed -- among other things -- to provide emergency communications, but you look what is in the



rules and there is not much in there."

"We are spectrum managers, not emergency people. The biggest request we get during emergencies is to be able to work phone on the CW only bands. This is interesting, because one of the major reasons for keeping the telegraphy requirements is for emergencies. One of the major problems in handling emergencies on the ham bands is too many amateurs want to get involved. It would be better if a lot more of them just 'stood by.'"

## ON PRIVATIZING OF AMATEUR CALL SIGNS

"This is coming down to a decision point ...it shouldn't be too long. We have completed our work on it and we are getting ready to submit it now. There is a big long approval cycle. When I say we have completed work on the issue, I mean at the branch level. We are no where near the end of the line. There are still a lot of approvals and reviews ahead yet."

"The threshold decision is whether we want to do it or not. One of the key things is whether or not it is going to cost us any resources. We have analyzed all of the comments. Thirteen people have proposed to issue amateur call signs in the private sector. The major proposals were by the League, the Callbook, Buckmaster Publishing, CAVEC and Forest Industries ...among others. Any decision is a couple of months away ...at best."

## OTHER PETITIONS BEING WORKED ON....

"We have a lot of petitions that are in various stages of being worked on. Among them..."

"...the VEC petition on code examinations is a little confusing to us. There are two considerations. One, the VEC's say it is difficult to use all of the characters in a five minute telegraphy test ...another is not to require examinations to contain all of the specified characters. Which is most important? Unfortunately, the VEC's didn't make that decision and sent us two requests. We now have to decide which is more important. We are talking about telegraphy requirements on both the examiner and the examinee."

"....A Mr. Fisher wants to limit the transmission of information bulletins over amateur radio to ten minutes per day per station."

"....A Mr. McKeathian filed a petition seeking more HF phone privileges for Technician operators."

"....A Mr. Ballentine wants to add six more license classes by having CW only, phone only and combined variations of the Novice, Technician and General licenses. Applicants that pass the written portion of amateur examinations would get voice privileges ...with CW privileges and spectrum added when the telegraphy element is passed. Under his proposal there would be eleven amateur license classes instead of five."

"....A Mr. Cisco asks that the FCC automatically upgrade all Technician, General and Advanced amateur operator licenses of Senior Citizens up one class providing they are 65 years or older and have held their amateur operator license twenty years or longer."

"We are now planning our (rulemaking agenda) kfor next quarter which starts in April."

[Edited conversation with Personal Radio Branch, FCC/Washington, February 4, 1988.]

● The March 1988 issue of Science Magazine states that Morse code use is decreasing at the rate of 10 percent a year. For the Maritime Services, the death knell will ring in the 1990's, they say, when the International Maritime Organization requires all ships to have one of three digital selective calling systems: VHF, SITOR (Simplex Telex Over Radio) or a satellite-based system on board.

While Morse code sometimes can't get through due to propagation characteristics, digital selective calling uses "hand shaking" computers to automatically correct poor message receipt and directs the message only to a specific recipient. "It is becoming much easier to direct to a signal 22,000 miles in the sky..., than to a Morse operator hopefully listening on the right frequency." (Page 65-66)

SAFETY DATA SHEET: Multiple-choice answer and tells you which answer is correct. (One of each is only \$18.95 postpaid.) (Complete Morse Code Course: 0-21 w.p.m.=\$29.95, ppd) PLUS Postage \$1.25 75¢ 50¢ each manual. \$3.00 plus postage \$3.50 plus postage \$4.00 plus postage \$4.50 plus postage \$5.00 plus postage \$5.50 plus postage \$6.00 plus postage \$6.50 plus postage \$7.00 plus postage \$7.50 plus postage \$8.00 plus postage \$8.50 plus postage \$9.00 plus postage \$9.50 plus postage \$10.00 plus postage \$10.50 plus postage \$11.00 plus postage \$11.50 plus postage \$12.00 plus postage \$12.50 plus postage \$13.00 plus postage \$13.50 plus postage \$14.00 plus postage \$14.50 plus postage \$15.00 plus postage \$15.50 plus postage \$16.00 plus postage \$16.50 plus postage \$17.00 plus postage \$17.50 plus postage \$18.00 plus postage \$18.50 plus postage \$19.00 plus postage \$19.50 plus postage \$20.00 plus postage \$20.50 plus postage \$21.00 plus postage \$21.50 plus postage \$22.00 plus postage \$22.50 plus postage \$23.00 plus postage \$23.50 plus postage \$24.00 plus postage \$24.50 plus 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## CANCER AMONG HAM RADIO OPERATORS

We have obtained a copy of the well publicized increased cancer incidence study in ham radio operators by Samuel Milham, Jr. of the Washington State Department of Social and Health Services. It was published in the January 1988 (Vol. 127, No. 1, p. 50-54) issue of the American Journal of Epidemiology and copyrighted by Johns Hopkins University.

The report, which runs to some five typeset pages, is far more exhaustive than at first anticipated from reading the various reported newspaper versions of the study. Following is a highly capsulized summary:

(1.) The study was conducted to determine the carcinogenic effects of electromagnetic field exposures. Andrew R. Sabol, W2EVE, of Waterville, NY, suggested that amateur operators might be a good group to study since they are exposed to electromagnetic fields in the pursuit of their hobby.

(2.) Since Dr. Milham could not obtain access to ARRL records, he purchased the 1984 FCC license file from the government.

(3.) All male amateurs with Washington or California addresses licensed between January 1, 1979, and June 16, 1984, were selected from FCC records. Since government records do not keep track of sex, female names were eliminated manually. YL's were not used in the study since they make up a small percentage of licensed amateurs.

(4.) In all, 67,829 amateurs and their birthdate (available from FCC records) were selected for the study. These names were searched for deaths in the two states. Both the name and birthdate had to match up.

(5.) While Milham mentions the "Silent Key" section of the League's journal, QST, as reporting amateur deaths, it appears that Washington and California state records were used to identify deceased amateurs. He mentions computer-based searching with manual backup.

(6.) Causes of death were translated into standard recognized "International Classifica-

tion of Diseases."

(7.) The Washington and California amateur operators selected for the study represented 232,499 "person-years" at risk and 2,485 deaths during the January 1, 1979, to December 31, 1984 study period. 2,083 California amateurs died, 402 in the state of Washington. "The patterns of mortality are similar in both states." Out-of-state deaths were excluded from the study.

(8.) Occupational information listed on Washington death certificates was also studied. California death certificates do not list occupations. 31% of Washington amateurs also work professionally in fields with high electromagnetic exposure - opposed to only 3% of the general Washington population.

(9.) A 1980 ARRL study of one in 44 amateurs indicate that the average amateur is a 46-year old male licensed in 1963 and spends 6.1 hours a week on his hobby. Males account for 94% of all amateurs and 43 percent worked or had worked in a related field.

(10.) Standardized mortality ratios (SMR's) were developed by dividing the observed deaths in ham operators by those expected (based on overall male-only trends) times 100. Many types of cancer deaths were investigated and amateurs had overall significantly higher SMR's than the general population.

(11.) While the overall mortality of ham operators compared favorably with that of all U.S. males, amateur radio operators licensed in Washington and California "have significant excess mortality due to acute myeloid leukemia, multiple myeloma and perhaps certain types of malignant lymphoma [cancers]."

(12.) Interestingly, the study also reveals a significantly reduced level of malignant and nonmalignant respiratory disease among ham operators suggesting amateurs smoke cigarettes less than the general U.S. population.

(13.) Dr. Milham concludes that "avocational and/or occupational exposures to electric and magnetic fields should be among the possible etiologies [causes] considered in explaining this excess mortality."



## YEAR-ENDING AMATEUR RADIO CENSUS BY YEAR & LICENSE CLASS FOR THE LAST 10 YEARS

<u>DECEMBER 31, 1987</u>	<u>1986</u>	<u>1985</u>	<u>1984</u>	<u>1983</u>	<u>1982</u>	<u>1981</u>	<u>1980</u>	<u>1979</u>	<u>1978</u>	
GMRS	37669	35819	33860	33675	27141	25063	22818	20788	16609	10609
Amateur Extra	43902	41082	38495	36149	34511	31530	29768	26613	24232	22498
Advanced	98610	97771	97959	97765	95771	94588	94428	88715	84981	83436
General	114398	115715	117107	116963	118223	119684	125747	123904	122783	118808
Technician	93466	85312	83679	80680	77298	75703	76976	70061	69022	68738
Novice	<u>83013</u>	<u>79882</u>	<u>78616</u>	<u>80599</u>	<u>85823</u>	<u>88799</u>	<u>80162</u>	<u>72588</u>	<u>61436</u>	<u>62856</u>
<b>TOTAL:</b>	<b>433389</b>	<b>419762</b>	<b>415856</b>	<b>412156</b>	<b>411626</b>	<b>410304</b>	<b>407081</b>	<b>381881</b>	<b>362454</b>	<b>356336</b>
RACES	343	346	351	440	490	549	563	577	591	605
Club	1940	2119	2235	2343	2420	2742	2992	3565	4028	4585
Military Rec.	125	140	163	175	193	217	241	295	340	367
Disaster	1	1	1	1	1	1	1	1	9	9

### GROWTH OVER PRIOR FIVE, TEN YEARS

License Class:	Five Yrs. 1982-'87	Five Yrs. 1978-'82	Ten Yrs. 1978-'87
Amateur Extra	+39.2%	+40.1%	+95.1%
Advanced	+ 4.3%	+13.4%	+18.2%
General	- 4.4%	+ 0.7%	- 3.7%
Technician	+23.5%	+10.1%	+36.0%
Novice	+ 6.5%	+41.3%	+32.1%
<b>TOTAL:</b>	<b>+ 5.6%</b>	<b>+15.1%</b>	<b>+21.6%</b>

### DISTRIBUTION OF AMATEUR LICENSES:

License Class:	Year 1987:	Year 1982:	Year 1978:
Amateur Extra	10.1%	7.7%	6.3%
Advanced	22.8%	23.1%	23.4%
General	26.4%	29.2%	33.4%
Technician	21.5%	18.4%	19.3%
Novice	19.2%	21.6%	17.6%
<b>TOTAL:</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

### LANDMARK RFI RULING ISSUED IN CANADA

A historic decision involving the susceptibility of electronic and electrical consumer equipment to radio frequency energy sources has been handed down in the Ontario (Canada) Court of Appeals at Toronto. The long awaited Ravenscroft/VE3SR RFI appeal finally was heard and ruled on by three justices on January 29 and 30.

Jack Ravenscroft is the Ottawa area amateur found guilty of violating the Canadian "nuisance statutes" since his amateur radio transmissions allegedly interfered with various RFI-prone electrical and electronic appliances belonging to a neighbor, the Houghtsby family. They brought suit against him. He was not charged with causing RFI per se. Jack's station had previously been inspected by the DOC and given a clean bill.

No new evidence was introduced during the appeal process. The original decision, which took Jack off the air and awarded \$2,500 damages to the Houghtbys, had to be judged on its legal merits alone. While no written judgement is yet available, it appears that:

- (1.) The injunction banning Jack from transmitting is lifted and he now may return to the amateur radio airwaves.
- (2.) Within a period of 90 days, Ravenscroft must arrange for radio frequency interference suppression modifications to be made to his neighbor's appliances. The RFI proofing must be to a standard approved by the Canadian Department of Communications.
- (3.) If the modifications are refused, then the injunction is permanently lifted.



(4.) The judges increased the monetary award to the Houghtbys from \$2,500 to \$5,000 "for inconveniences suffered."

(5.) While Jack will continue to be responsible for 60% of the costs incurred by his neighbor prior to the original trial, no additional costs were awarded to Jack or his neighbor. Each are responsible for all of their own costs.

The Canadian Amateur Radio League, which has been closely following the trial and appeal process issued a press release on January 31 stating that the decision:

Seems to imply that solving radio frequency interference problems is:

(a.) ...a responsibility that must be shared by both the radio amateur and those experiencing the RF interference. The amateur must be prepared to arrange for modifications to susceptible equipment at the amateur's expense ...technical improvements that will adequately suppress the interference.

(b.) ...Those experiencing the interference must be prepared to accept those modifications. If they do not, the amateur may continue operating without making the required improvements.

(c.) ...The DOC (Canadian version of our FCC) cannot avoid becoming involved in these instances ...even if the interference is to non-radio equipment. In fact, they must become the arbitrator in these matters and make a determination when the amateur has done all that can be reasonably expected ...and when those experiencing the problem must take responsibility for the susceptible nature of their RFI prone equipment.

At press time, it was not known if Jack or his neighbor were agreeable to the terms of the judgement.

While the landmark decision affects only Canada, one cannot help but wonder just how long it will be before a similar decision is handed down here in the United States where identical RF susceptibility problems also exist. (Thanks: CRRL)

## FOUNDATION FOR AMATEUR RADIO, INC.

...a non-profit organization with headquarters in Washington, D.C., plans to award twenty-eight scholarships for the 1988-1989 academic year to assist licensed Radio Amateurs. The foundation, composed of fifty local area Amateur Radio Clubs, fully funds six of these scholarships with the income from grants and its annual Hamfest.

It administers without cost to the donors scholarships for the Quarter-Century Wireless Association, several radio clubs, the Amateur Radio News Service, the Richard G. Chichester Memorial, the Young Ladies' Radio League and the 10-10 International Network.

Licensed Radio Amateurs may compete for these awards if they plan to pursue a full-time course of studies beyond high school and are enrolled or have been accepted for enrollment at an accredited university, college or technical school.

Some of the scholarships require the holding of at least an FCC General class license. The awards range from \$500 to \$2,000 with preference given in some cases to residents of specified geographical areas or the pursuit of certain programs.

Additional information and application forms can be requested by letter or QSL card, postmarked prior to May 31, 1988 from:

FAR Scholarships  
6903 Rhode Island Avenue  
College Park, MD 20740.

● ARRL Board of Directors met in Farmington, Conn. on January 22-23 and voted to respond to the Milham health study (see page 4), and to substantially increase participation in the NASA manned space program and defense of amateur radio spectrum.

● Look for these special "200" prefixes between Feb. 13-19 (Arizona/Oregon), Feb 20-26 (Nebraska), Feb. 27-Mar. 4 (Ohio) and March 5-11 (Florida.) The "200" number is used to replace your call sign district indicator and commemorates the 200th anniversary Bicentennial of the U.S. Constitution.



## Technology Report, Railroad Radio Control...

### FCC AUTHORIZES RAIL TRAFFIC SYSTEM

Radio control of models, a hobby that many amateurs engage in, will soon be coming to full size trains. An elaborate rail traffic control system will operate on spectrum just above and below the 902-928 MHz ham band.

On January 14th, the FCC waived several of its rules to authorize the Association of American Railroads (AAR) to use six conventional 900-MHz frequency pairs (located in the 896-901 and 935-940 MHz bands) for an "Advanced Train Control System."

When completed, ATCS will be the largest land mobile radio system in the world. It will link Amtrak and the private rail industry with a computerized traffic control system which is being compared to the radio network used by the FAA to control air traffic.

The system will automate rail operations nationwide, this enabling trains to operate more safely and efficiently. ATCS will automatically determine the position and speed of any train operating anywhere in the nation, operate switches, alert dispatchers and engineers to potential safety hazards, and - if necessary, remotely take full control of locomotives away from engineers from hundreds of miles away to prevent accidents.

A train engineer checks into the system by simply inserting a plastic identity card into a radio reader. A computer on the locomotive will then automatically display route information such as the location of track work, areas in which the train should reduce speed, rail cars to be picked up enroute and the route profile. A control center computer would authorize the train's movements and download this information by radio to the computer on the locomotive. The control center updates or modifies this information during the trains route automatically.

At frequent intervals, the train's on-board computer radios the trains location to the control center. The train's computer calculates the speed necessary to meet schedules and to ensure safety.

ATCS is accomplished through a sophisticated system of microprocessor-based radio-controlled locomotives lashed to a network of transponders located along the rail tracks as close as one mile apart. Cost estimates for the new system range to the \$3 billion mark. Movement of trains would be monitored in much the same fashion the FAA monitors movement of aircraft. Railroad track owners will constantly keep trains under surveillance that enter its territory.

Amtrak, however, could have trouble raising their initial investment of \$300 million. Last year Amtrak received \$600 million in subsidies from the federal government and they are reluctant to underwrite any additional costs. They want ATCS to be privately funded.

Currently, railroad control systems consist primarily of operating rules, written regulations and electronic, electric and manually operated signal systems. No longer will humans be making the rail traffic decisions.

AAR, an association representing most major American railroads, requested radio licenses for 2,059 base stations and 30,000 mobile units in the 900-MHz spectrum. It plans to apply for approximately 941 more base stations.

In order to construct the system, AAR asked the FCC to waive a number of its 900-MHz frequency rules and time restrictions for completing the system. The FCC said they would establish an 80-mile zone of protection around each rail traffic path - a zone 10 miles more than usual co-channel separation.

While ATCS will have voice capability, it would be used primarily for digital data transfer. The Railway Assoc. of Canada has applied to the Canadian DOC to operate the same system on identical spectrum in Canada.

ATCS, which promises to revolutionize the way railroads are managed and operated, is a product of five years of testing. The bottom line is that engineers will no longer be driving the train. Computers will do it for them ...aided by 900 MHz radio control.  
[Action by FCC Order, Released: 1/29/88.]



## DECEMBER VE PROGRAM STATISTICS....

	December	1985	1986	1987
No. VEC's:		*77	*76	*59
No Testing Sessions:		293	368	445
	1985	1986	1987	
ARRL:	52.6%	43.8%	40.5%	
W5YI:	17.1%	26.8%	27.6%	
DeVRY:	4.4%	6.3%	4.1%	
CAVEC:	7.9%	6.3%	6.7%	
Others:	18.0%	16.8%	21.1%	
Year-to-Date Sessions:		3223	3784	4378
No. Elements Admin.:		5470	5028	8494
	1985	1986	1987	
ARRL:	55.6%	55.4%	49.9%	
W5YI:	16.6%	20.4%	20.3%	
CAVEC:	5.8%	5.8%	5.9%	
DeVRY:	3.1%	4.3%	2.7%	
Others:	18.9%	14.5%	21.2%	
Year-to-Date Elements:		62589	61921	81042
No. Applicants Tested:		3651	3386	4837
	1985	1986	1987	
ARRL:	54.6%	58.6%	52.1%	
W5YI:	17.2%	20.2%	20.8%	
CAVEC:	5.8%	5.3%	5.5%	
DeVRY:	3.1%	4.6%	3.1%	
Others:	19.3%	11.3%	18.5%	
Year-to-Date Applic:		41439	42422	49728
Pass/Upgrade Rate, All:		62.0%	58.5%	61.2%
Pass/Upgrade Rate, W5YI:		59.5%	65.4%	56.7%
Applicants per Session:		12.5	9.2	10.9
Appl. per Session/W5YI:		14.9	11.4	7.4
No. Elements Per Appl./All:		1.5	1.5	1.8
No. Sessions Per VEC/All:		3.8	4.8	7.5

\* = The FCC considers ARRL, W5YI, and DeVry to be 13 VEC's each since VEC's are appointed on a regional basis. The 13 regions are: Call sign districts 1 through 0 plus: Alaska (11) and Caribbean (12) and Pacific Insular areas.(13)

[Source: FCC, Washington, D.C. 20554]

● **Charles Farnsworth, W6SYP**, of Lodi, California, was featured in full color on the front page of the Lodi News-Sentinel for his ham radio emergency work.

● A lot of squabbling going on in television industry circles regarding what spectrum parameters should be adopted for the new high definition "Advanced Television." The

broadcast associations want the FCC to allocate wider TV channels to accommodate the wider bandwidths needed for HDTV broadcast television. The satellite and cable groups want different transmission standards to develop for each video medium. The Land Mobile Communication Council feels that television should remain at a 6-meg. bandwidth so as not to use spectrum that could be allocated to business interests. Everyone seems to be looking after themselves.

● Our sources north-of-the-border tell us that there is increased speculation that the Canadian DOC is on the verge of approving a new four class amateur licensing system with a no-code VHF-UHF entry level license (no home brewing allowed). The second class would require 5 wpm code, no technical exam and allow all modes, all bands, 200 watts max - again with only commercially available radios. The third class is rumored to require 12 wpm, an easy technical exam and permit all modes, all bands, 1 KW max with commercial gear. The fourth class is the only one that allows home-made equipment to be used after taking a technical exam. The prohibition against using home-brewed equipment is a new concept and kind of interesting! But let's face it. Most ham gear is now store bought.

● The purpose of the upcoming USSR/-Canada Transpolar Skitrek where amateur radio will provide the only communications is for scientific purposes ...to make geomagnetic, glacial and meteorological observations. The expedition is privately organized and financed by Komsomolskaya Pravda (Soviet Youth Newspaper) and the Polar Bridge Company, a Canadian group with commercial sponsors. Their ICOM ham radio gear will be carried in backpacks. Six air drops are scheduled - one every two weeks, three from the USSR and three from Canada. Coordination of all Canadian communications is by Tom Atkins/-VE3CDM who is presently in Moscow working out the details. The skiers will have to battle many obstacles ...open water, thin ice, pressure ridges, low temperatures (to minus 50 degrees Celsius), winds and storms. Amateurs around the world will be able to hear the OSCAR-11 satellite read the skier's location to them over 2-meters at 145.825 MHz. The trek gets underway in about three weeks.

W5YI-VEC  
P.O. Box 101  
Dallas, Texas 75207  
Every manual contains every word-for-word question!  
Test Manual: 1 Ea. \$1.00  
5-9 \$50  
10 or more Quantity \$3.00 plus postage



• The ARRL DXAC has unanimously voted to add Western Sahara "SQ" to the DXCC countries list. It is now up to the ARRL Headquarters Awards Committee.

• On January 5, a new record was set for EME contacts on six meters when Ray Rector, WA4NJP, in Georgia QSO'd with Mike Staal, K6MYC/KH6 in Hawaii at 0940 UTC. This was the first transoceanic 6-meter EME and the ninth 6-meter contact. Tnx WB5YYX

• The new president of TAPR, the Tucson Amateur Packet Radio Corporation, will be introduced at their annual meeting to be held at the Inn at the Airport, in Tucson on February 20 and 21. As mentioned earlier, Lyle Johnson, WA7GXD, TAPR's president since February 1983, has withdrawn his name from consideration. Lyle spent most of December on the edge of the Simpson Desert in Western Australia where the daytime temperature zoomed to 106 F.

• The FCC is under pressure to find ways to reduce their 1988 spending. Their Fiscal-88 budget was reduced by roughly \$7 million ...from an original \$107 million to \$99.6 million. Even though the higher budget figure was "authorized" by the Senate's FCC Authorization Act of 1987, the House cut the budget. Some 75% of the FCC budget is earmarked for personnel salaries and benefits ...with 13% for fixed costs which can't be cut. Time off without pay is being considered.

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## MORE ON TALKING TO YOUR TELEVISION

Through its Washington, D.C. law firm, Radio Telecom & Technology, Inc. (RTT) of Cerritos, California, has submitted comments on the TV Answer, Inc. petition to have 500 kHz allocated from the 216-222 MHz band to establish a Television Viewer Response Service. (See last issue, page 9)

RTT says they have a better way to provide for an interactive TV response system. They utilize spectrum adjacent to a TV channel and the unused "blanking interval when no picture is visible." RTT states the "T-Net" system has significantly more data carrying capacity ...even allowing use of a complete ASCII keyboard for responses.

Their research indicates that "there is a significant need for interactive television for education and entertainment and numerous other commercial applications, such as credit card verification, electronic mail, home shopping, alarm monitoring, etc., which are not being met using existing technology."

T-Net (according to Radio Telecom and Technology) is more spectrum efficient in that it does not require a new allotment of spectrum that is in demand by non-broadcast services and will not interfere with TV channel 13 reception. (Filed: 1/22/88).

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## UNIDEN CORP. TO ENTER HAM GEAR BIZ

We had heard a report that the Uniden Corporation of America, a large Indianapolis, Indiana, maker of consumer and business electronic equipment was entering the Amateur Radio equipment business. What alarmed us was the rumor that the major marketing effort of this amateur gear would be to truck stops ...and non-amateurs. This was more or less confirmed when a major amateur radio magazine called Uniden seeking advertising. We decided to investigate.

Uniden manufactures a very broad line of radio and electronic equipment. A billion dollar firm, they make the 'Bearcat' line of scanners, CB radios, marine electronics, land mobile and police radios, cordless telephones, satellite TV receivers ...and all sorts of sophisticated personal communications products. Developing a line of amateur gear certainly would not be difficult for them.

We telephoned Jim Haynes, their Chief Engineer last week to ask him about the HR-2510, a 25 watt 10 meter Ham Radio that we had heard about. Jim said that he was not an amateur, but used to sell amateur gear when he was in the retail business in the Baltimore area. Haynes said "The HR-2510 was designed in the far east from features we put together here."

As far as the promotional emphasis went, Jim said he did not get involved with that. Jim referred us to a John Heenan in their Marketing Services Department. Jim said he certainly hoped that Uniden's main



marketing thrust would not be to truck stops. He also said that he had almost daily contact with the FCC.

Amateur equipment need not be type accepted, but promoting ham gear to truck stops would not help Uniden's image with the Commission. Uniden's entry into the amateur equipment business, according to Haynes, stems from last year's FCC rulemaking allowing entry level amateurs to operate in the voice mode on 10 meters.

We tried to telephone John Heenan several times, but he was never available. We did reach a Uniden customer service department girl at their toll free number (1-800-521-9627) who said she knew nothing about a model HR-2510. She said "...it might be a new CB radio."

We were also able to talk to their lawyer in Washington, D.C. I asked Gregg Skall of the Washington law firm of Baker & Hostetler about Uniden's entry into amateur radio and he was also unaware of it. We told him of the report that we had that the amateur transceiver would be primarily promoted to non-amateurs. Although a lawyer, Gregg was even completely unaware of ham radio rules and asked us what FCC §Part number covered the Amateur Radio Service. I told him to carefully check §Part 97.40. He was very friendly, helpful and thanked us for the information.

A couple of days later, after giving up trying to reach John Keenan, we were able to talk to his boss, Paul Davis, the Vice President of Sales. It is possible ...even probable ...that his Washington lawyer or Jim Haynes had spoken to him before we got to him, because he immediately said that the HR-2510 would indeed be promoted to the licensed amateur market. He said that the marketing report we heard was simply not true and that "the magazine" must have spoken to someone that thought the transceiver in question was a CB radio. "Our advertising department must have erred," he said. "We will follow the 'letter-of-the-law....'"

Davis said the HR-2510 was a 28.000 to 29.899 MHz transceiver that covered ten

meters in 4-bands - bands "A", "B", "C" and "D" each cover a segment. The radio features USB/LSB/CW/AM/FM ...25 watts sideband, 10 watts AM/FM. The HR-2510 sports a "5-function" 12 digit LED readout that yields standing wave ratio, relative signal strength, RF modulation, calibration readings, and so forth. Retail "will be in the \$399.00 class" but that would be up to the retailer to decide.

I asked Davis who would be selling the transceiver. He said the radio will be sold through Uniden's regular two-step distribution program. They will market it to their network of distributors and will have no control over who they sell it to. Davis said they had distributors in every market and "It is up to them where they sell it." There will be advertising materials ...ad mats and slicks ...available to support them. It will be promoted in ham publications.

The HR-2510 has not yet been produced. The first production run is scheduled for April and "...it will be available to us in May." Davis also told us that Uniden would be relocating their sales, marketing and distribution department to the Dallas area. A new 240,000 square foot distribution facility has been leased near the Dallas/Fort Worth Airport's "Centerport Industrial Park."

In all cases we found the folks at Uniden to be very personable, open and candid. Our investigation indicates that they indeed will be entering the amateur equipment business and they say they intend to follow the rules. It is questionable, however, as to whether their distributors will exercise any control whatsoever over who their dealers sell to. As a whole, their distributors do not primarily sell the amateur radio market. Some amateur equipment - maybe a substantial amount - is bound to fall into non-amateur hands.

We also were told that Tandy/Radio Shack would also have 10-meter transceivers available "near year end." Radio Shack's Bob Miller/KG5AK -- a Tandy consumer marketing VP and Advanced Class amateur -- said he had no comment on that report and that it was Tandy's policy not to comment on new products until they were available.